

August 25, 2007

Reference: Application 10/710,574

To: Samir M. Shah
Art Unit 2856

RESPONSE TO NON-FINAL REJECTION

Prior art disclosed and anticipated by Tanielian et al (6,134,485) is patently distinct from instant invention because of the following:

- 1) Tanielian et al do not disclose a method for structural integrity monitoring, instead they provide disclosure for a system and a method of collecting a diverse set of data. There is no any indication made on how this data should be processed in a way that would result in structural integrity information. The data collection by itself can not be considered as “structural integrity monitoring” because this term has well known meaning known not only to one familiar with the art but to general public as well. Instant invention has fundamental difference herein as it disclose reliable method that gives clear presentation of current status of structural integrity
- 2) Tanielian et al provide no indication on use of collected data except for flight status information. This use of sensor data is obvious and trivial, as direct display of data from plurality of sensors can provide conclusion for neither flight nor structural integrity status. In fact presentation of plurality of sensor data is inherently confusing and requires additional analysis to provide an interpretation.
Instant invention, on contrary, provides unambiguous results of structural integrity (claim 1). The fundamental difference is: said results contain no uninterrupted signals or data; instead, they are direct display of current status and/or change dynamics of structural integrity status.

Prior art disclosed and anticipated by Breed (2003/0009270) is patently distinct from instant invention because of the following:

- 1) Breed teaches of pattern monitoring (paragraph 0072), and trained technologies that differentiate normal and abnormal behavior patterns (paragraph 0073), and pattern of time series data (0074). These teaching contains little or no novelty as wealth of pattern recognition algorithms were available in public domain on date of referenced publication and application of said algorithms to recognize particular “trained” patterns is the most common practical use for them. Obviously, once trained abnormal pattern is recognized the prediction of ongoing failure can be made. This obvious use of pattern recognition algorithms with or without system disclosed by Tanielian presents no novelty.
Instant invention is vitally different: It teaches “the use of variable plurality